

# **Report on International Telecommunications Markets 1999 Update**

**Prepared for Senator Ernest F. Hollings  
Committee on Commerce, Science, and Transportation  
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**FCC Report on International Telecommunications  
1999 Update**

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## **Introduction**

This report updates the data provided by the Federal Communications Commission in the 1998 “Report on International Telecommunications Markets.” As the information below indicates, international calling prices have continued to decline significantly over the last year; countries are continuing to open their markets to competition by foreign telecommunications and satellite companies; and a number of other developments are working to lower prices and increase international calling volumes. These developments are in large measure attributable to the 1997 WTO Basic Telecom Agreement. In addition to the WTO Agreement, Commission policies such as settlement rate reform have played an important part, along with other political and economic forces over which the Commission has no control.

### **I. International Wireline Telecommunications Services**

#### **A. Declines in International Pricing**

##### **1. Introduction**

Less than two years into the Commission’s implementation of the WTO Basic Agreement on Telecommunications and the August 1997 Benchmarks Order, we have already started to see dramatic results. These policies have increased liberalization, privatization and competition, which have led to significantly lower international accounting rates, which in turn have resulted in lower international calling rates. In 1996, the year just prior to the Benchmarks Order and the WTO Agreement, the average price of an international long distance call originating from the United States was 74 cents per minute. By 1998, it fell 25% to 55 cents/minute on average. Aggregate data for 1999 are not yet available, but all indications are that the trend toward lower rates has continued. By the time the Benchmarks Order is fully implemented in 2003, we expect to see much deeper reductions in international calling rates. Prices on competitive routes have fallen even more dramatically. For example, rates on the U.S.-UK route are as low as 10 cents per minute.

##### **2. International Pricing Declines for Five of the Largest Routes**

The following table details the three largest U.S. carriers' discount rates available to residential subscribers from 1997 through 1999 on five of the largest international traffic routes by volume of minutes. Rate changes on these routes are typical of rate changes on international routes generally. The table indicates that, with a few exceptions, the rates charged by all three carriers have declined. In 1999, carriers offered customers several plans with differing flat monthly fees. For 1999, we have included the plan with the least change from 1998 in the flat monthly fee. Some plans with higher flat monthly fees have lower per minute rates.<sup>1</sup>

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<sup>1</sup> Note: These data represent a minor change from what was provided in last year’s report. Last year the data showed the best rate available from the major carriers 24 hours a day, and the current report, in some cases, shows ranges which reflect the difference between rates during peak and off-peak times.

## AT&T

	Nov-97	Nov-98	Dec-99
Canada	\$0.05 - \$0.12	\$0.05 - \$0.10	\$0.05 - \$0.10
Mexico	\$0.49	\$0.44	\$0.35
Germany	\$0.35	\$0.25 - \$0.29	\$0.17
Japan	\$0.47	\$0.30	\$0.16
India	\$0.80	\$0.75	\$0.55
Monthly Fee*	\$3.00	\$3.00 - \$5.95	\$5.95

## MCI WorldCom

	Nov-97	Nov-98	Dec-99
Canada	\$0.12	\$0.05 - \$0.12	\$0.05 - \$0.07
Mexico	\$0.61	\$0.44	\$0.42
Germany	\$0.35	\$0.29	\$0.09 - \$0.17
Japan	\$0.48	\$0.35	\$0.35
India	\$0.80	\$0.80	\$1.22 <sup>2</sup>
Monthly Fee*	\$3.00	\$3.00	\$4.95

## Sprint

	Nov-97	Nov-98	Dec-99
Canada	\$0.10 - \$0.25	\$0.10	\$0.10
Mexico	\$0.55 - \$0.75	\$0.47	\$0.63
Germany	\$0.30 - \$0.70	\$0.27	\$0.25
Japan	\$0.43 - \$0.87	\$0.46	\$0.39
India	\$1.05 - \$1.40	\$0.78	\$0.72
Monthly Fee	\$3.00	\$3.00	\$5.95

Note: Range represents peak/off-peak.

\*Includes domestic discounts in 1999.

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<sup>2</sup> The chart shows per minute rates for each carrier's international discount calling plan with the lowest monthly fee. For example, MCI WorldCom offers three different international calling plans which can reduce the per minute cost for calls to India to as low as \$0.55/minute, if the subscriber pays a higher monthly fee.

## **B. Countries with WTO Commitments that Allow a Majority Foreign-owned Company to Provide Facilities-based International Service**

The following countries allow foreign entities to own a majority interest in facilities used to provide international service, including voice and data:

### Europe

Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Italy, Luxembourg, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom

### Asia Pacific

Japan, Australia, New Zealand

### Latin America

Colombia, El Salvador, Guatemala, Chile

### New Countries<sup>3</sup>

Ireland

Peru

Portugal

## **C. U.S. Investment in Foreign Countries**

### 1999 Investment

According to a report titled “2000 Multimedia Telecommunications Review and Forecast,”<sup>4</sup> the telecom equipment industry, which weathered economic downturns in Latin America and Asia without a significant decrease in revenue, saw spending rise 16.7% in 1999 in major international markets such as Canada, Mexico, South America and the Asia-Pacific region. Spending on telecom equipment and services is estimated to reach \$983 billion by year-end in Canada, Mexico, Western and Eastern Europe, Latin America, and the Asia-Pacific region combined. Spending on transport services, equipment, and support services will soar to \$1.8 trillion in 2003 at a 16.7% compound annual growth rate. The report states that U.S. manufacturers are expected to capture \$45 billion of an estimated \$345 billion of international spending on telecom equipment in 2003.<sup>5</sup>

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<sup>3</sup> The list of new countries is a list of countries whose commitments under the WTO Basic Telecom Agreement, with respect to foreign ownership of facilities for the provision of international voice traffic, have come into effect or restrictions previously in effect have been lifted since last year’s report. Peru’s obligations became effective June 1, 1999. Ireland, Portugal and Canada’s obligations became effective January 1, 2000.

<sup>4</sup> The Telecommunications Industry Association (TIA) and the Multimedia Telecommunications Association (MMTA) jointly issued this report.

<sup>5</sup> Communications Daily (Dec. 15, 1999), based on the report by the Telecommunications Industry Association and

Mexican long distance operator Alestra, owned 49% by AT&T, plans to invest \$61 million over the next thirteen months as part of its effort to expand infrastructure. The investment follows the company's original plan to invest \$1 billion between 1996 and year-end 2000. Investments to date now total \$930 million. Alestra plans to use its long distance infrastructure to offer local services to existing clients in Mexico City, Guadalajara, and Monterrey. U.S.-based network solutions provider Lucent Technologies supplied most of the company's fiber optic infrastructure and Harris Corporation supplied its microwave technology.

This past year, regulators approved the Concert \$10 billion global venture between AT&T and British Telecom (BT), which has the goal of serving the entire communications needs of multinational companies and individuals around the world. In a press release, AT&T and BT reported they have agreed to invest a total of \$1 billion, split equally between them, in U.S. businesses involved in high technology and emerging communications markets.<sup>6</sup>

The venture combines the cross-border assets and operations of each company. These take into account their existing international networks, international traffic, and international products for business customers, including an expanding set of Concert services and AT&T and BT's multinational accounts in specific industry sectors.<sup>7</sup> Further, the two companies plan to build an intelligent, managed Internet Protocol (IP)-based global network. This network will support global electronic commerce, global call centers, and new Internet-based solutions to support multinational organizations and executives.<sup>8</sup>

In April 1999, Qwest and KPN completed the formation of a joint venture to create a pan-European IP-based fiber optic network linked to Qwest's infrastructure in North America for data, voice and video. The Strategis Group<sup>9</sup> reports that in order to complete the deal, the venture expects to raise approximately \$800 million of debt. According to the Strategis Group, an additional investment of \$500 million a year will be allocated over the next two years.

According to the December 1999 Bear Stearns Report titled "Telecommunications Services," each party owns 50% of the venture and has contributed transatlantic capacity that connects the Euro Rings with Qwest's network in North America, in addition to other assets. Upon creation of the KPN Qwest joint venture, Qwest contributed Xlink Internet Services and the operating subsidiaries of EUnet International Ltd, which Bear Stearns reports totaled approximately \$300

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the Multimedia Telecommunications Association.

<sup>6</sup> Source: Press Release on Concert web site, at <http://www.concert.com/whoweare/att072698.asp>.

<sup>7</sup> Source: Id.

<sup>8</sup> Source: Id.

<sup>9</sup> The Strategis Group is a telecommunications consulting group based in Washington DC.

million in net book value.

In December 1999, KPN Qwest announced that it had reached an \$11 million, 10-year deal to provide IP broadband to Europe Online Networks.<sup>10</sup> This deal is the latest example of KPN Qwest's expansion into Europe as it rolls out its pan-European network. In November 1999, KPN Qwest achieved a local access agreement with the UK-based Colt Telecommunications to offer IP and ATM local connectivity in all cities served by Colt's network.<sup>11</sup>

Bear Stearns, in its Telecommunications Services Report dated May 1999, reports that Level 3 spent \$75 million on international and transoceanic networks. Bear Stearns notes that Level 3 Communications has embarked on a plan to become a facilities-based provider of a broad range of integrated services in the US, Europe, and Asia. To attain this goal, the company is combining construction, purchase and leasing of facilities and other assets to supply end-to-end services. The company is building the network around IP technology. According to Bear Stearns, in April 1999, Level 3 contracted with Tyco Submarine Systems to design and build a transatlantic terabit cable system from Long Island to Cornwall, UK. The cable system is expected to cost between \$600 and \$800 million and will provide service by September 2000.

Bear Stearns also reports that Level 3 plans to finalize a contract relating to the construction of Ring 1 of its European Network in France, Belgium, Netherlands, Germany, and the UK. Ring 1, which is an inter-city network of approximately 3,500 miles, will ultimately connect a minimum of thirteen local city networks in Europe. The network will be linked to the Level 3 U.S. network by Level 3's cable system. Bear Stearns reports that in May 1999, Level 3 and Colt Telecom Group announced an agreement to share costs for the construction of European networks. The agreement calls for Level 3 to share construction costs of Colt's planned 1600 mile inter-city Germany network linking Berlin, Cologne, Düsseldorf, Frankfurt, Hamburg, Munich, and Stuttgart. In return, Colt will share construction costs of Level 3's planned European network.

Global Crossing's recent \$1 billion purchase of the British company, Racal, is a bellwether of the industry trend to offer "one-stop shopping" for consumers, and a sign of the importance of the European market. In addition, the Strategis Group reports that Global Crossing is expected to spend \$800 million on its European infrastructure by 2000.

According to the Strategis Group, MCI WorldCom is projected to invest approximately \$1.2 billion in capital expenditures for all international networks and facilities, including pan-European networks to provide service to Stuttgart, Basel, Geneva, and Dublin. The Strategis Group reports that it plans to establish facilities-based national services in the UK, France, Germany, and Belgium, and extend its network services to Denmark. In an October 1999 press

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<sup>10</sup> Source: KPN Qwest Press Release at: [http://www.kpnqwest.com/pressroom/press\\_main.asp](http://www.kpnqwest.com/pressroom/press_main.asp).

<sup>11</sup> Source: Id.

release, MCI WorldCom announced the formation of a new, wholly owned operating company in Korea to provide business customers with data communications services. Korea is the fifth Asian market where MCI WorldCom operates on a local and global basis. The others include Australia, Hong Kong, Japan, and Singapore.

Merrill Lynch reported in a 1999 publication titled “Alternative Multinational Carriers” that new entrants have gained significant share from incumbents, and it predicts they could capture 20% within the next five years. Consolidation is expected among new entrants as they seek to gain scale by acquiring facilities, customers, and distribution channels. Examples include the following: Global TeleSystems Group’s purchase of Esprit Telecom, IDT’s purchase of Interexchange, RSL Communication’s purchase of Delta3, and Star Telecom’s purchase of Primus Telecom.

U.S. local telecommunications operators continued to align themselves with foreign public telecommunications operators and to launch into the global telecom market. In its August 1999 Telecommunications Services Report, Bear Stearns reports that Ameritech made a \$3.4 billion investment in Bell Canada this past May, providing Ameritech with a 20% stake in the Canadian operator.

#### **D. World Telecommunications Revenues Handled by Monopoly Providers and Selected New Entrants**

Attachment 1 contains 1998 revenue data for the twenty-five largest public telecommunications operators (PTOs). Attachment 2 shows, for selected U.S. and foreign non-incumbent multinational carriers, first quarter revenue figures for 1999 and 1998 and the percent of change in revenue from first quarter of the previous year to first quarter of the next year.

#### **E. Number of New Entrants Providing Service in:**

##### **1. Top Ten Foreign Markets by Teledensity**

The list below shows the total number of new entrants providing service in the foreign market. A new entrant is defined as any provider of telecommunications services other than the former monopoly provider. Markets included in the list are the top ten markets by teledensity, which is measured by the number of telephone lines per inhabitant.<sup>12</sup>

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<sup>12</sup> Source: A Telegeography Directory, New International Carriers 1999, Europe, Asia-Pacific and Americas Editions; A Telegeography Directory, New International Carriers, 1998, Europe, Asia-Pacific and Americas Editions.

	<u>1998</u>	<u>1999</u>
Sweden	14	15
Switzerland	23	40
Denmark	12	18
Canada	15	47
Luxembourg	2	3
Iceland	1	3
France	33	48
Finland	8	8
Hong Kong	4	59
Netherlands	26	29

## 2. Top Five Foreign Markets by Market Revenue

In the current report, we felt it would be helpful to include a list of new entrants providing service in the top five markets by market revenue, in addition to the previously provided top ten markets by teledensity to give a more complete picture of the global telecommunications landscape.<sup>13</sup>

	<u>1998</u>	<u>1999</u>
Japan	9	42
Germany	32	44
United Kingdom	122	158
France	33	48
Italy	14	20

## F. International Settlement Rates

Settlement rates are the rates international carriers pay each other to complete international calls. One of the keys to lowering consumer prices is lowering the settlement rates U.S. carriers pay to foreign carriers. Attachment 3 details U.S. settlement rates with carriers from WTO signatories. Attachment 3 is separated into two parts: the first part provides data on WTO signatories that have made full market access commitments; the second part provides data from countries with lesser commitments. These tables demonstrate that settlement rates have generally been falling.

As of year-end 1999, the FCC will have achieved compliance with its August 1997 Benchmarks Order for 99% of the net settled minutes for upper income countries (those that were scheduled to be in compliance by 1/1/99) and 86% of net settled minutes for upper-middle

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<sup>13</sup> Source: Id.

income countries (those scheduled to be in compliance by 1/1/00).

### **G. Interconnection Charges**

Interconnection charges refer to the charges competing carriers are required to pay to interconnect directly with the incumbent operator and terminate international and domestic calls. Only countries with liberalized telecommunications markets, in general, have publicly available interconnection charges. Attachment 4 lists national interconnection charges for European Union countries. In nearly all cases for which data were available, interconnection charges have declined from 1997 to 1999.

### **H. Data on Teledensity and Foreign & U.S. Billed Traffic in WTO Signatories**

Attachment 5 provides information on foreign and U.S. billed traffic for 1997 and 1998, as reported by U.S. carriers.

Attachment 6 provides teledensity information (telephone lines per 100 inhabitants) for WTO members. It includes actual teledensity data for 1996 through 1998. The table shows that teledensity is generally rising in WTO members.

## **II. Satellite Telecommunications Information**

The attached information is an update to our 1998 submission of requested data regarding global and regional satellite services.

The satellite services sector of the telecommunications market is growing rapidly and continues to diversify its service offerings. The Satellite Industry Association (SIA), which represents the U.S. commercial satellite industry, estimates that over 1,000 new commercial satellites will be built and launched over the next decade. The new satellite systems will bring business and other consumers a wide variety of new broadband and mobile voice and data services and will connect users in countries around the globe.

According to SIA, total revenue in 1998 for the commercial satellite industry exceeded \$65.9 billion and the percentage of annual revenue growth is expected to be in the double digits over the next decade. Clearly, the WTO Agreement has set an important benchmark for opening markets to satellite services around the world. Many countries – particularly in Latin America and increasingly in Europe, Africa, and Asia as well – have liberalized their regulations. Furthermore, there are a significant number of countries that now: permit multiple entities to obtain licenses to provide voice, data, or video services for their own use or for third-party use; permit ownership and operation of private earth station equipment; and permit choice in providers of satellite capacity. Several countries allow licensed radio and television broadcasters and cable television providers to own their own transmission broadcast facilities and to purchase satellite capacity without restriction.

According to SIA, satellite companies continue to view the WTO Agreement as a positive force in the development and growth of the satellite industry. In fact, many satellite manufacturers are changing satellite designs to increase the coverage area of various satellite system configurations based on the assumption that future continued success on the regulatory front will result in market access when satellites are eventually launched.

Over the past year, the FCC has authorized two non-U.S. satellite service providers, TMI and New Skies, to offer service in the United States. In addition, the FCC has developed a “Permitted List” of U.S. and non-U.S. satellite systems whereby earth station operators providing fixed-satellite service in the conventional C- and Ku-bands may access any of these designated satellites without additional Commission action, consistent with the technical parameters authorized in the earth station licenses.

Attachments 7 and 8 have been updated from last year on a company-specific basis. All of the attached information was gathered using public information sources.